ABSTRACT OF THE DISCLOSURE

A robot remote manipulation system is provided, including a bipedal walking robot and a remote manipulation device for remotely manipulating the bipedal walking robot. The robot is connected to the remote manipulation device via a communication network and controlled by controlling data from the remote manipulation device. In the system, the remote manipulation device comprises a pair of 10 bilateral mechanical rotating elements providing a quantity of motion for each bilateral leg of the bipedal walking robot; and a controlling data transmitter for transmitting controlling data corresponding to the quantities of motion to the 15 bipedal walking robot. The bipedal walking robot comprises a controlling data receiver for receiving the controlling data transmitted from the remote manipulation device; and a leg motion controller for processing the received controlling data and causing 20 the bilateral legs to move forward or backward.